BATCH COLD CLEANING MACHINES - WORKPLACE PRACTICES This Side Facing Operator

- Collect/store waste solvent in closed containers labeled as hazardous waste, if required. Closed container may vent vapor but not liquid.
- 2. Drain cleaned parts at least 15 seconds or until dripping stops. Parts with cavities shall be tipped while draining. Drainage shall be directly into machine.
- 3. Flush within freeboard area with solid stream under 10 pounds per square inch gauge (psig), unless flushing is fully enclosed.
- 4. Fans should not blow across machine openings.
- 5. Sponges, fabric, wood, leather, paper products, and other absorbent materials shall not be cleaned/dried in machines.
- 6. Agitation, if used, shall produce a rolling motion (no splashing). Air agitation is not allowed.
- 7. Solvent spills shall be cleaned up immediately. Materials used to clean up spills shall be stored in closed containers. (See #1).
- 8. Do not let solvent exceed the fill line.
- 9. Machines, if heated, shall have a temperature control device to prevent overheating and boiling. Control device shall be operated/maintained as manufacturer recommends.
- 10. Machines and auxiliary equipment shall be free of all liquid leaks. Any liquid leak shall be repaired at once or isolated to prevent leakage. Otherwise, machine shall be shutdown and drained until repaired/replaced.
- 11. Drain/fill solvent containers below the surface of the receiving container where possible to reduce splashing.

Batch cold cleaning machines shall be operated in accordance with the following procedures:

(7 DE Admin. Code 1124 Section 33.3.3)

- 1. Waste solvent, still bottoms, and sump bottoms shall be collected and stored in closed containers and labeled as waste solvent, pursuant to 7 DE Admin. Code 1302, Delaware's Regulations Governing Hazardous Waste, as applicable. The closed containers may contain a device that allows pressure relief, but does not allow liquid solvent to drain from the container. (33.3.3.1)
- 2. Cleaned parts shall be drained at least 15 seconds or until dripping ceases, whichever is longer. Parts having cavities or blind holes shall be tipped or rotated while the part is draining. During the draining, tipping or rotating, the parts shall be positioned so that solvent drains directly back to the cleaning machine. (33.3.3.2)
- 3. Flushing of parts using a flushing device such as a flexible hose shall be performed only within the freeboard area of the cold cleaning machine. The solvent flushing shall be a solid fluid stream, not an atomized or shower spray, at a pressure that does not exceed 10 pounds per square inch gauge (psig) unless the flushing device is contained within a fully enclosed designed system, such as a flush booth which contains the overspray. (33.3.3.3)
- 4. Work area fans shall be located and positioned so that they do not blow across the opening of the cold cleaning machine. (33.3.3.4)
- 5. Sponges, fabric, wood, leather, paper products, and other absorbent materials shall not be cleaned or dried in the cold cleaning machine. (33.3.3.5)
- 6. Any solvent bath agitator shall be operated to produce a rolling motion of the solvent with no observable splashing of the solvent against the tank walls or the parts being cleaned. Air agitated solvent baths may not be used. (33.3.3.6)
- 7. Spills during solvent transfer and use of the cold cleaning machine shall be cleaned up immediately, and the wipe rags or other absorbent material shall be immediately stored in covered containers for disposal or recycling. (33.3.3.7)
- 8. The owner or operator shall ensure that the solvent level does not exceed the fill line. (33.3.3.8)
- 9. If heated, the cold cleaning machine shall have a temperature control device that will avoid overheating and prevent boiling of the cleaning solution. The temperature control device shall be operated and maintained in accordance with manufacturer's recommendations. (33.3.3.9)
- 10. Cold cleaning machine container or containers shall be free of all liquid leaks. Auxiliary equipment such as pumps, pumps, water separators, steam traps, or distillation units, shall not have any liquid leaks, visible tears, or cracks. In addition, any liquid leak, visible tear, or crack detected shall be repaired immediately, or isolated such that no further leak can occur, or the cleaning machine shall be drained of all solvent and shutdown until the equipment is replaced or repaired. (33.3.3.10)
- 11. Draining or filling of solvent containers or the cold cleaning machine shall be performed beneath the solvent surface of the receiving container whenever possible to reduce splashing. (33.3.11)